

REMARKS/ARGUMENTS

Status of the Application

Claims 1-10 are pending and stand rejected. Claims 1 and 7 have been amended. No new matter has been added to the present application.

In view of the foregoing amendments and the following remarks, Applicants respectfully request entry of this Amendment Response, reconsideration of the present application and an early Notice of Allowance.

Objections of Record

Claim 7 is objected to for containing certain informalities. Applicants have amended claim 7 by deleting “the” on line 4. Applicant has not changed “of” to “or” in lines 5 and 6 because “of” is believed to be correct. Therefore, Applicants respectfully request withdrawal of the objection to claim 7.

Claim Rejections – 35 U.S.C. § 102(b)

Claims 1-2, 4 and 6 stand finally rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Sugawara *et al.* (U.S. Pat. No. 6,060,772 and Sugawara hereinafter). Applicants respectfully traverse the rejection and request reconsideration because Sugawara fails to teach every element of the recited claims.

Applicants note that Sugawara discloses a power semiconductor module. The module has semiconductor chips that have control electrodes that are connected to wiring patterns formed on a controlling substrate disposed above the semiconductor chips. (Col. 2, ll. 29-38).

In light of the foregoing amendments, Applicants respectfully submit that the Examiner's rejection is moot because Sugawara does not disclose all of the limitations of newly amended claim 1. In particular, Sugawara fails to disclose a "main current electrode [arranged] *immediately above* one of said plurality of semiconductor elements or wiring pattern connected to the one of said plurality of semiconductor elements" as claimed. The Examiner points to electrode 5 of Sugawara as anticipating the main current electrode 13 of the present application.

While, and as noted in Applicants' previous response to the March 14, 2003 Office Action, electrode 5 may be at a slight elevation difference compared to an outer edge of insulated wiring substrate 2 (*see* Fig. 3 of Sugawara), electrode 5 is not *immediately above* the insulated wiring substrate 2 as now claimed. Instead, electrode 5 is located to the side of the insulated wiring substrate 2. Applicants respectfully submit that main current electrode 13 of the present invention is arranged *immediately above* a top surface of thermal conductor base board 3 rather than slightly above and beside an outer edge of such board 3 (*see* application, as filed, p. 13, l. 13 – p. 14, l. 8; Figs. 5B, 6 and 7). Therefore, contrary to the Examiner's assertions in the comments to the Advisory Action, electrode 5 of Sugawara cannot anticipate the main current electrode 13 of the present application that is arranged "*immediately above* one of said plurality of semiconductor elements..." as claimed. Support for the language in which the electrode 13 is "immediately" above the elements can be found at p. 14, ll. 1-2, of the specification. No new issues are believed to be raised by this amendment.

Because Sugawara does not recite all the limitations of claim 1 as amended, Applicants respectfully submit that Sugawara does not anticipate claim 1. As claims 2, 4 and

6 ultimately depend from claim 1, Applicants respectfully submit that claims 2, 4 and 6 are not anticipated by Sugawara for the reasons explained above.

Claim Rejections – 35 U.S.C. § 103(a)

Claim 3 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Sugawara in view of Bryan (U.S. Pat. No. 3,735,057 and Bryan hereinafter). Claim 5 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Sugawara in view of Dubelloy (U.S. Pat. No. 5,495,889 and Dubelloy hereinafter). Claims 7-10 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Sugawara in view of Ota *et al.* (JP 6-283639 and Ota hereinafter).

Applicants respectfully traverse the Examiner's rejection of claims 3 and 5. As discussed above concerning newly amended claim 1, Sugawara fails to disclose main current electrode 13 of the present application that is arranged "*immediately above* one of said plurality of semiconductor elements..." as claimed. Applicants respectfully submit that both Bryan and Dubelloy are devoid of teachings that would suggest the subject matter of claims 3 and 5 in the context of a semiconductor device having a main current electrode formed immediately above semiconductor elements as in claim 1. Accordingly, Applicants respectfully submit that claims 3 and 5 patentably defines over Sugawara in view of Bryan or Dubelloy.

With respect to claims 7-10, the Examiner stated in the Advisory Action dated June 20, 2003, that the Applicants' arguments were unpersuasive because "claim 7 does not specifically [claim] that *the metal member is adapted to have a main current electrode or [terminal] integrally formed thereon.*" (emphasis added). As a result, according to the Examiner, Sugawara "discloses all of the structure limitations set forth in the claim."

Applicants respectfully submit that the Examiner is mistaken with respect to the content of claim 7. Claim 7 recites, in part:

“...a metal member on which a main current electrode of the one of the plurality of semiconductor elements and a terminal for electrically connecting said semiconductor device and a circuit external to said semiconductor device are formed integrally, wherein said metal member is arranged in a position apart from said substrate by using said case without directly contacting said substrate.” (emphasis added)

Thus, and as discussed in Applicants' previous response to the March 14, 2003 Office Action, Applicants respectfully submit that the cited references, either separately or in combination, do not render obvious the invention as claimed. The Examiner points to the electrodes 14 of Sugawara as being “a member on which a main current electrode ... and a terminal ... are formed integrally” as in the present application. However, the electrodes 14 are “for receiving signals from outside,” and are *not adapted to have a main current electrode or terminal integrally formed thereon* as in the claimed invention. (Col. 5, ll. 8-10; Fig. 3). Sugawara does not disclose these structural limitations. Thus, Sugawara neither teaches nor suggests a member on which a main current electrode and a terminal are formed integrally as claimed.

Applicants again respectfully submit that Ota fails to cure the deficiencies of Sugawara. In particular, Applicants respectfully contend that Ota is devoid of teachings that would suggest the subject matter of claim 7 in the context of *a member on which a main current electrode and a terminal are formed integrally* as claimed. (see, e.g., Translation, p. 1, ll. 9-14; Fig. 1). Accordingly, Applicants respectfully submit that claims 7-10 patentably define over Sugawara in view of Ota.

CONCLUSION

Applicants respectfully reiterate that the March 14, 2003 Office Action was made prematurely final as Applicants' previous amendment did not "necessitate" a new rejection. As discussed in Applicants' previous response to the present Office Action, the addition to claim 1 made in Applicants' response to the Office Action of September 11, 2002 was the subject matter of pending claim 8. Thus, the Examiner should have already searched the subject matter of both claims 1 and 8 in preparing the first Office Action. According to MPEP § 706.07(a), "a second or subsequent action on the merits in any application ... should not be made final if it includes a rejection, on prior art not of record, of any claim amended to include limitations which should reasonably have been expected to be claimed." Applicants respectfully contend that adding the subject matter of claim 8 to claim 1 in light of the Examiner's rejections in the September 11, 2002 Office Action should have reasonably been expected. Accordingly, Applicants respectfully request withdrawal of the finality of the Office Action dated March 14, 2003. As a result, entry of the proposed amendment to claims 1 and 7 are believed to be proper irrespective of whether they introduce "new issues" for consideration by the Examiner.

In view of the foregoing amendments and remarks, Applicants respectfully submit that the pending claims patentably define over the prior art. Accordingly, entry of this Amendment and a Notice of Allowance are respectfully requested.

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**PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO 37 CFR § 1.116**

In the event that the Examiner believes that the present application is not allowable for any reason, the Examiner is encouraged to contact the undersigned attorney to discuss resolution of any remaining issues.

Respectfully submitted,

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